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EXAMINER				
KANERVO, VIRPI H				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/601,199

Applicant(s)

ERIKSSON, JOHAN

Examiner

VIRPI H. KANERVO

Art Unit

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 3-6, 8 and 10-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-6, 8 and 10-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the Claims

1. Claims 1, 3-6, 8, and 10-14, are presented for examination. Applicant filed an amendment on 02/17/2009, amending claims 1, 3-6, 8, and 10-14. In light of Applicant's amendments, Examiner withdraws the grounds of the §112 rejection of claims 1, 8, and 10-11; and the grounds of the §101 rejection of claims 1 and 3-6. However, Examiner maintains the grounds of the §101 rejection of claims 8 and 10-14, and the grounds of the §103 rejection of claims 1, 3-6, 8, and 10-14. Since Examiner has maintained the previous grounds of the §103 rejection, the rejection of claims 1, 3-6, 8, and 10-14, is a FINAL rejection of the claims.

Response to Arguments

2. The §112 rejection: In light of Applicant's amendments, Examiner withdraws the §112 rejection of claims 1, 8, and 10-11.
3. The §101 rejection: In light of Applicant's amendments, Examiner withdraws the §101 rejection of claims 1 and 3-6. However, Examiner maintains the §101 rejection of claims 8 and 10-14. Applicant has, e.g.,

amended claim 8 with a new limitation "(CSD)-system that includes a CSD computer." However, claim 8 is directed to a method, but the new limitation above seems to be directed to a system. In order for a method claim to be directed to a statutory subject matter, the critical steps of the method must be tied to another statutory class, *i.e.*, machine or apparatus. In the instant case, Applicant could, *e.g.*, carry out the critical steps of the method by a computer by following amendments: "providing, by a CSD computer, financial instruments ... defining, by a CSD computer, each of the financial instruments ..." etc.

4. Lea (2005/0209940 A1) reference: Applicant argues that Lea fails to disclose financial instruments because "deal objects are not financial instruments that can be traded." Examiner disagrees. Lea specifically discloses that "according to a first aspect of the present invention there is provided a method of evaluating the credit exposure of a portfolio of one or more financial instruments" (Lea: page 1, ¶ 12). Therefore, Lea discloses financial instruments.
5. Althoff (6,366,922 B1) reference: Applicant argues that "Althoff fails to teach that a change in an upper level results in a corresponding change in lower level." Examiner disagrees. Althoff specifically discloses that "all the subclasses which exist within given dimensional class automatically inherit the linked reference to the consolidated data" (Althoff: col. 2, lines 59-61),

and that “the user can create, edit and manipulate both the application objects in the database and the application object-relational model” (Althoff: col. 4, lines 4-6). Thus, the user can make a change in a given hierarchical level, and that change will be inherited in the levels below it. Therefore, Althoff discloses that a change in an upper level results in a corresponding change in lower level.

6. Indeval (*Disclosure Framework For Securities Settlement System*; October 3, 2000) reference: Applicant argues that “there is no mention that the Indeval CSD is computerized.” While this may be the case, Examiner has used Lea reference to show that “the system is a computer system” (Lea: page 3, ¶ 39). Thus, Lea in view of Indeval discloses computerized CSD system.
7. Lea in view of Althoff, and further in view of Indeval: Applicant argues that it does not “make sense to combine Lea or Althoff with Indeval’s CSD.” Applicant argues specifically that “it makes no sense to use the custodial services of Indeval’s CSD to assess portfolio risk or to do a database search that is not even related to financial instruments.” Examiner disagrees.

The rationale to support a conclusion that the claim would have been obvious is that (1) all the claimed elements were known in the prior art; (2) one skilled in the art could have combined the elements as claimed

by known methods with no change in their respective functions; and (3) the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention. See *KSR International Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007).

Here, (1) Lea discloses all the other elements of the claim 1, except a Centralized Securities Depository (CSD)-system where a computer is coupled to the database that configures the financial instruments and financial instrument templates in a hierarchical, multi-level structure based on the attributes such that a financial instrument on a first level in the hierarchy is defined by at least one of the attributes which are common for financial instrument templates on a level higher in hierarchy, wherein the computer is arranged to link each financial instrument on the first level to only one financial instrument template on the higher hierarchical level. Althoff discloses a computer coupled to the database that configures the financial instruments and financial instrument templates in a hierarchical, multi-level structure based on the attributes such that a financial instrument on a first level in the hierarchy is defined by at least one of the attributes which are common for financial instrument templates on a level higher in hierarchy, wherein the computer is arranged to link each financial instrument on the first level to only one financial instrument template on the higher hierarchical level; and Indeval discloses a Centralized Securities Depository (CSD)-system. Therefore, all the claimed elements were known in the prior art. (2) Althoff and Indeval do not change the

existing elements in Lea. Also, the elements in Althoff and Indeval, which are combined with the elements of Lea, remain the same after combining the elements of Lea, Althoff, and Indeval. Therefore, one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. (3) The results of combination of Lea, Althoff, and Indeval, are predictable because the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention.

Therefore, claims 1, 3-6, 8, and 10-14, are obvious over Lea in view of Althoff, and further in view of Indeval, under 35 U.S.C. § 103(a).

Claim Rejections - 35 USC § 101

8. 35 U.S.C. § 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. Claims 8 and 10-14 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter.

Claim 8 is independent claim, and it is directed to method that is not linked to another statutory class, *i.e.*, it is directed to non-statutory subject matter. Therefore, claim 8 is rejected as directed to non-statutory subject

matter. None of the dependent claims 10-14 correct the non-statutory subject matter in claim 8. Therefore, claims 10-14 are also rejected for being directed to non-statutory subject matter.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in § 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1, 3-6, 8, and 10-14, are rejected under 35 U.S.C. § 103(a) as being unpatentable over Lea (2005/0209940 A1) in view of Althoff (6,366,922 B1), and further in view of Indeal (*Disclosure Framework For Securities Settlement System*; October 3, 2000).

As to claim 1, Lea shows a memory (Lea: page 3, ¶¶ 39-40) including a register structure of a plurality of financial instruments (Lea: page 1, ¶ 12) and templates for financial instruments (Lea: page 2, ¶ 21), each of which is defined by attributes (Lea: page 1, ¶ 13; and page 2, ¶ 21).

Lea does not show a computer coupled to the database that configures the financial instruments and financial instrument templates in a hierarchical, multi-level structure based on the attributes such that a

financial instrument on a first level in the hierarchy is defined by at least one of the attributes which are common for financial instrument templates on a level higher in hierarchy, wherein the computer is arranged to link each financial instrument on the first level to only one financial instrument template on the higher hierarchical level. Althoff shows a computer coupled to the database that configures the financial instruments and financial instrument templates in a hierarchical, multi-level structure based on the attributes such that a financial instrument on a first level in the hierarchy is defined by at least one of the attributes which are common for financial instrument templates on a level higher in hierarchy (Althoff: col. 2, lines 57-61), wherein the computer is arranged to link each financial instrument on the first level to only one financial instrument template on the higher hierarchical level (Althoff: Fig. 1, label 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the system of Lea by a computer coupled to the database that configures the financial instruments and financial instrument templates in a hierarchical, multi-level structure based on the attributes such that a financial instrument on a first level in the hierarchy is defined by at least one of the attributes which are common for financial instrument templates on a level higher in hierarchy, wherein the computer is arranged to link each financial instrument on the first level to only one financial instrument template on the higher hierarchical level of Althoff in order to provide a object/rational database management system in which

multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

Lea in view of Althoff does not show a Centralized Securities Depository (CSD)-system. Indeval shows a Centralized Securities Depository (CSD)-system (Indeval: page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the system of Lea in view of Althoff by a Centralized Securities Depository (CSD)-system of Indeval for the purpose of using custodial and related services provided by the CSD system (Indeval: pages 2-3).

As to claim 3, Lea in view of Althoff, and further in view of Indeval, shows all the elements of claim 1. Lea in view of Indeval does not show that an amendment to an attribute in financial instrument or financial instrument template will cause the same amendment in the same attribute of those financial instruments or financial instrument templates which are linked to the amended financial instruments and which are on lower levels in the hierarchy than the amended financial instrument or financial instrument template. Althoff shows that an amendment to an attribute in financial instrument or financial instrument template will cause the same amendment in the same attribute of those financial instruments or financial instrument templates which are linked to the amended financial instruments and which are on lower levels in the hierarchy than the amended financial instrument or financial instrument template (Althoff: col.

2, lines 59-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the system of Lea in view of Indeval by an amendment to an attribute in financial instrument or financial instrument template will cause the same amendment in the same attribute of those financial instruments or financial instrument templates which are linked to the amended financial instruments and which are on lower levels in the hierarchy than the amended financial instrument or financial instrument template of Althoff in order to provide a object/rational database management system in which multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

As to claim 4, Lea in view of Althoff, and further in view of Indeval, shows all the elements of claim 1. Lea shows also that the financial instruments on the first level of the hierarchy are also financial instrument templates (Lea: page 2, ¶ 21).

As to claim 5, Lea in view of Althoff, and further in view of Indeval, shows all the elements of claim 1. Lea in view of Althoff does not show that the financial instruments from the first hierarchical level and lower in the hierarchy are financial instruments which can be traded within the CSD-system. Indeval shows that the financial instruments from the first hierarchical level and lower in the hierarchy are financial instruments

which can be traded within the CSD-system (Indeval: page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the system of Lea in view of Althoff by the financial instruments used from said second level and downwards in the hierarchy being financial instruments which can be traded within the CSD system of Indeval for the purpose of using custodial and related services provided by the CSD system (Indeval: pages 2-3).

As to claim 6, Lea in view of Althoff, and further in view of Indeval, shows all the elements of claim 4. Lea in view of Indeval does not show that financial instrument templates in the hierarchy are only allowed one link to a hierarchical level above their own hierarchical level, but more than one link to hierarchical levels below their own hierarchical level. Althoff shows that financial instrument templates in the hierarchy are only allowed one link to a hierarchical level above their own hierarchical level, but more than one link to hierarchical levels below their own hierarchical level (Althoff: Fig. 1, label 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the system of Lea in view of Indeval by financial instrument templates in the hierarchy being only allowed one link to a hierarchical level above their own hierarchical level, but more than one link to hierarchical levels below their own hierarchical level of Althoff in order to provide a object/rational database management

system in which multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

As to claim 8, Lea shows providing financial instruments and financial instrument templates for safekeeping in a computer-implemented system that includes a computer (Lea: page 3, ¶¶ 39-40); and defining each of the financial instruments (Lea: page 1, ¶ 12) and templates for financial instruments (Lea: page 2, ¶ 21) by attributes (Lea: page 1, ¶ 13; and page 2, ¶ 21).

Lea does not show configuring the financial instruments and financial instrument templates together in a hierarchical multi-level structure based on the attributes, defining a financial instrument on a first level in the hierarchy by at least one of the attributes which are common for a financial instrument template on a higher hierarchical level, and linking each financial instrument to only one financial instrument template on the higher hierarchical level above that financial instrument. Althoff shows configuring the financial instruments and financial instrument templates together in a hierarchical multi-level structure based on the attributes (Althoff: col. 2, lines 57-61), defining a financial instrument on a first level in the hierarchy by at least one of the attributes which are common for a financial instrument template on a higher hierarchical level (Althoff: col. 2, lines 59-61), and linking each financial instrument to only one financial instrument template on the higher hierarchical level above

that financial instrument (Althoff: Fig. 1, label 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Lea by configuring the financial instruments and financial instrument templates together in a hierarchical multi-level structure based on the attributes, defining a financial instrument on a first level in the hierarchy by at least one of the attributes which are common for a financial instrument template on a higher hierarchical level, and linking each financial instrument to only one financial instrument template on the higher hierarchical level above that financial instrument of Althoff in order to provide a object/rational database management system in which multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

Lea in view of Althoff does not show Centralized Securities Depository (CSD)-system. Indeval shows Centralized Securities Depository (CSD)-system (Indeval: page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Lea in view of Althoff by Centralized Securities Depository (CSD)-system of Indeval for the purpose of using custodial and related services provided by the CSD system (Indeval: pages 2-3).

As to claim 10, Lea in view of Althoff, and further in view of Indeval, shows all the elements of claim 8. Lea in view of Indeval does not show that any amendment to an attribute in a financial instrument template causes the

same amendment in the same attribute of those financial instruments or financial instrument template which are linked to the amended financial instrument or financial instrument template and which are on lower levels in the hierarchy than the amended financial instrument. Althoff shows that any amendment to an attribute in a financial instrument template causes the same amendment in the same attribute of those financial instruments or financial instrument template which are linked to the amended financial instrument or financial instrument template and which are on lower levels in the hierarchy than the amended financial instrument (Althoff: col. 2, lines 59-61). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Lea in view of Indeal by any amendment to an attribute in a financial instrument template causing the same amendment in the same attribute of those financial instruments or financial instrument template which are linked to the amended financial instrument or financial instrument template and which are on lower levels in the hierarchy than the amended financial instrument of Althoff in order to provide a object/rational database management system in which multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

As to claim 11, Lea in view of Althoff, and further in view of Indeal, shows all the elements of claim 8. Lea shows also that the financial instruments placed on at least said first level of the hierarchy are financial instrument templates on a lower level of the hierarchy (Lea: page 2, ¶ 21).

As to claim 12, Lea in view of Althoff, and further in view of Indeal, shows all the elements of claim 8. Lea in view of Althoff does not show that the financial instruments used from said first level and lower in the hierarchy are financial instruments which can be traded within the CSD system. Indeal shows that the financial instruments used from said first level and lower in the hierarchy are financial instruments which can be traded within the CSD system (Indeal: page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Lea in view of Althoff by the financial instruments used from said first level and lower in the hierarchy are financial instruments which can be traded within the CSD system of Indeal for the purpose of using custodial and related services provided by the CSD system (Indeal: pages 2-3).

As to claim 13, Lea in view of Althoff, and further in view of Indeal, shows all the elements of claim 11. Lea in view of Indeal does not show that financial instrument templates in the hierarchy only given one link to a

level above their own level can have more than one link to levels below their own level. Althoff shows that financial instrument templates in the hierarchy only given one link to a level above their own level can have more than one link to levels below their own level (Althoff: Fig. 1, label 16). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Lea in view of Indeval by financial instrument templates in the hierarchy only given one link to a level above their own level being able to have more than one link to levels below their own level of Althoff in order to provide a object/rational database management system in which multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

As to claim 14, Lea in view of Althoff, and further in view of Indeval, shows all the elements of claim 8. Lea in view of Indeval does not show finding an existing financial instrument or financial instrument template in the CSD-system which has all of the attributes of the financial instrument which is to be added, placing the financial instrument which is to be added on a level in the hierarchy which is below said existing financial instrument or financial instrument template, and creating a link between the financial instrument to be added and the existing financial instrument or financial instrument template to thereby add the financial instrument to the CSD system. Althoff shows finding an existing financial instrument or financial

instrument template in the CSD-system which has all of the attributes of the financial instrument which is to be added (Althoff: col. 2, lines 57-61; Fig. 1, label 16; and col. 4, lines 4-7), placing the financial instrument which is to be added on a level in the hierarchy which is below said existing financial instrument or financial instrument template (Althoff: col. 2, lines 57-61; and Fig. 1, label 16), and creating a link between the financial instrument to be added and the existing financial instrument or financial instrument template to thereby add the financial instrument to the CSD system (Althoff: col. 2, lines 57-61; Fig. 1, label 16; and col. 4, lines 4-7). It would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Lea in view of Indeval by finding an existing financial instrument or financial instrument template in the CSD-system which has all of the attributes of the financial instrument which is to be added, placing the financial instrument which is to be added on a level in the hierarchy which is below said existing financial instrument or financial instrument template, and creating a link between the financial instrument to be added and the existing financial instrument or financial instrument template to thereby add the financial instrument to the CSD system of Althoff in order to provide a object/rational database management system in which multidimensional searches can be easily constructed by the user in a dynamic manner (Althoff: col. 2, lines 33-47).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR § 1.136(a). A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR § 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VIRPI H. KANERVO whose telephone number is 571-272-9818. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m., EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander G. Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3691

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Virpi H. Kanervo

/Alexander Kalinowski/

Supervisory Patent Examiner, Art Unit 3691